DOCUMENT RESUME

ED 458 704 EA 031 418

AUTHOR Haenn, Joseph F.

TITLE The Effectiveness of Summer School in Getting Students To Function on Grade Level in Gateway Grades.

PUB DATE 2001-04-00

NOTE 13p.; Paper presented at the Annual Meeting of the American Educational Research Association (Seattle, WA, April 10-14, 2001).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS *Educational Assessment; *Educational Strategies; Elementary Education; *Instructional Effectiveness; *Student Evaluation; *Summer Schools

IDENTIFIERS *Durham City School District NC

ABSTRACT

Students in Durham, North Carolina, who do not perform on grade level in grades 3, 5, and 8 must attend an 18-day summer school. End-of-grade tests in reading and math, given twice, and teacher ratings of achievement level determine who must attend. An end-of-grade test given when the summer session concludes decides whether the student is promoted, unless the student has limited English proficiency, is overage for his peer group, or is promoted at the discretion of a Student Assessment Panel. A study examined 1,300 students eligible for summer school, attempting to identify the characteristics of students who are and are not successful at the end of summer school based on their participation, previous performance level, number of performance requirements, and ethnicity. The goal was to determine which students benefited from such short-term remediation. White students were more likely to be successful than African-American students; those needing to pass both reading and math had 1 chance in 10 of being successful. Those needing only to pass the math test had a much greater chance of promotion than those who had to pass only the reading test. Large numbers of students went from the lowest achievement level to work on grade level in less than 6 weeks. (RKJ)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 458 704

The Effectiveness of Summer School in Getting Students to Function On Grade Level in Gateway Grades

Joseph F. Haenn
Durham (NC) Public Schools

Paper presented at the Annual Meetings of the American Educational Research Association (AERA), April 2001, Seattle, Washington

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J. F. Haenn

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

BEST COPY AVAILABLE

EA 031418

The Effectiveness of Summer School in Getting Students to Function On Grade Level in Gateway Grades

Joseph F. Haenn
Durham (NC) Public Schools

Background

North Carolina has implemented a statewide testing program consisting, in part, of end-of-grade (EOG) tests in grades 3 through 8 in both reading and mathematics. Further, the State used teacher ratings of students to establish 4 levels of achievement for each test and grade level. These Achievement Levels were developed and anchored for the 1992-93 administration of the EOG testing program, which was the first year of statewide implementation and reporting. In other words, they were set to establish a baseline against which future progress could be compared without having to compete with a moving baseline.

These Achievement Levels are as follows:

- *Achievement Level 1*: Students performing at this level do not have sufficient mastery of knowledge in this subject area to be successful at the next level.
- *Achievement Level 2*: Students performing at this level demonstrate inconsistent mastery of knowledge and skills in this subject area and are minimally prepared to be successful at the next level.
- *Achievement Level 3*: Students performing at this level consistently demonstrate mastery of the subject matter and skills and are well-prepared to be successful at the next level.
- *Achievement Level 4*: Students performing at this level consistently perform in a superior manner beyond that required to be proficient at the next level.

In an effort to ensure that social promotion was not occurring on a widespread basis, Durham Public Schools (DPS) has implemented a mandatory summer school for students in the gateway grades of 3, 5, and 8 who do not perform "on grade level" (i.e., score at Level 1 or 2) on the North Carolina EOG Tests. DPS students have two opportunities to pass both the reading and mathematics portions of the EOG at the end of the year in these gateway grades—a regular administration of the EOG followed by a retest within the next two weeks.[1] If students do not pass both the reading and mathematics portions of the test during these two administrations, they are required to attend an 18-day summer school.[2,3]

---

[1] Students passing (i.e., scoring at Level 3 or higher) both the reading and mathematics portions during the first testing do not have to participate in the retest. Students who do not pass one or both portions are retested only on those portions that they were unable to pass during the first administration.

[2] Students who choose not to attend this mandatory summer school are supposed to forfeit their opportunity for promotion to the next grade.

[3] Each administration of the EOG tests uses a different form of the test.

By demonstrating performance at grade level or above on a third administration of the EOG at the end of summer school, students are eligible for promotion to the next grade. However, students who still do not pass the EOG may be promoted to the next grade under several circumstances:

- The student is exempt or excused from testing due to special test handicapping circumstances, such as limited English proficiency (LEP) or an Exceptional Children's Program (ECP) condition.[4]

- The student is reviewed by a Student Assessment Panel (SAP) and the SAP recommends promotion regardless of the student's performance on the EOG test administrations.

- The student is overage for his peer group. For the 1999-2000 school year overage was defined being age 11 or greater for third graders, 13 or greater for fifth graders, and 16 or greater for eighth graders (as of October 16, 1999).

- The student passes both the reading and mathematics components of the EOG or comes within one point of passing each component of the EOG.[5]

The purpose of this paper will be to identify the characteristics of students who are and are not successful at the end of this summer school experience based on their previous performance on the EOG testing program. It will examine the degree of success of summer school participants in gateway grade levels based on their participation, previous performance level, number of performance requirements, and ethnicity. The purpose is to try to determine the types of students for which such short-term remediation is most appropriate.

Data Sources and Methods

More than 1,300 students in grades 3, 5, and 8 were identified as being eligible for summer school following the second administration (i.e., retest) of the End of Grade tests. A database was created of all eligible students, who were subsequently tracked on the following:

- Whether they were promoted to the next grade
- Whether they were exempt by IEP as an ECP student
- Whether they were exempt based on LEP status
- Whether they participated in summer school or were a no show
- Whether they completed summer school

For those students who attended summer school, information was also included about their performance on the third administration of the EOG test. This information as well as student demographic information was included in the final data base.

---

[4] Not all ECP students are exempt from passing the EOGs as a prerequisite for promotion. Some students are exempt from testing altogether while others are required to attend summer school, but not required to pass the EOG. A third category of ECP students requires them to both attend and pass the EOG in or to be promoted. The conditions are established within their Individualized Education Plan (IEP).

[5] The State of North Carolina is implementing a gateway promotion policy for the fifth grade students only during the 2000-01 school year. However, this policy provides for promotion to the next grade if a student comes within one standard error of measurement of passing each portion of the EOG. In following years this statewide policy will expand the promotion requirements to the third and eighth grades.

Results

Student information was analyzed to determine the characteristics of students who attended summer school (e.g., ethnicity, previous level of achievement, number and types of subject area deficiencies) and the relationship of these variables to ancillary variables (e.g., completion/noncompletion of summer school) and to subsequent student performance on the third adminstration of the EOG at the conclusion of summer school. These results are reported below.

A total of 929 students attended summer school out of more than 1,300 in the system determined to be eligible. The breakdown for these students by grade and ethnicity is shown in Table I. The overwhelming percentage of summer school students were African-American (89.2 percent), while only 5.7 percent of the summer school attendees were white. These percentages compare to system-wide percentages across all grade levels of 56.4 percent for African-Americans and 32.7 percent for whites across all grade levels. In other words, it appears that African-American students were greatly overrepresented in the summer school student population, while white students were greatly underrepresented.

TABLE I

Ethnicity * Grade Level for Summer School Participants

			Grade			
			03	05	08	Total
Ethnicity	American Indian	Count	1	1	1	3
		% within Ethnicity	33.3%	33.3%	33.3%	100.0%
		% within Grade	.3%	.3%	.4%	.3%
	Asian	Count	3	1	2	6
		% within Ethnicity	50.0%	16.7%	33.3%	100.0%
		% within Grade	.8%	.3%	.8%	.6%
	Black	Count	327	275	227	829
		% within Ethnicity	39.4%	33.2%	27.4%	100.0%
		% within Grade	87.4%	91.1%	89.7%	89.2%
	Hispanic	Count	13	9	4	26
		% within Ethnicity	50.0%	34.6%	15.4%	100.0%
		% within Grade	3.5%	3.0%	1.6%	2.8%
	Multiracial	Count	6	6		12
		% within Ethnicity	50.0%	50.0%		100.0%
		% within Grade	1.6%	2.0%		1.3%
	White	Count	24	10	19	53
		% within Ethnicity	45.3%	18.9%	35.8%	100.0%
		% within Grade	6.4%	3.3%	7.5%	5.7%
Total		Count	374	302	253	929
		% within Ethnicity	40.3%	32.5%	27.2%	100.0%
		% within Grade	100.0%	100.0%	100.0%	100.0%

Unfortunately, there were far too many students who could have benefited from summer school who chose not to attend. As shown in Table II, 266 students passed up the opportunity to attend

summer school and, therefore, passed up a chance to be promoted upon completion of summer school and passing the EOG test on the third administration. According to the records in the database, each of these students was not exempt from the EOG testing requirement due to ECP or LEP status. Seventy of these students were promoted even though they did not attend summer school. These students could have benefited from the summer school experience even if they did not pass the EOG test after their participation.

TABLE II
Characteristics of Students Choosing Not to Attend Summer School

	Grade 3	Grade 5	Grade 8	TOTAL
Promoted Without Attending Summer School	36	20	14	70
Retained Due to Failure to Attend Summer School	68	30	98	196
TOTAL	104	50	112	266

Of those students who were promoted without attending summer school, 15 (41.7 percent) of the third graders, 8 (40 percent) of the fifth graders, and 6 (42.9 percent) of the eighth graders were promoted based on the recommendation of a Student Assessment Panel. However, all of these students still could have benefited from the additional targeted instruction offered during summer school. In addition, two fifth grade students were promoted by their principal even though the Student Assessment Panel recommended grade retention.

It is especially troublesome that almost 200 students forfeited a possible chance for promotion to the next grade by failing to attend summer school.

A total of 164 students who did attend summer school subsequently were promoted without passing the EOG requirements (Table III). Most of these students (65.2 percent) were unable to pass only the reading component. Almost as many students who were promoted were unable to pass both the reading and the mathematics components as the number of students who were unable to pass only the mathematics component.

TABLE III
Summer School Promotions Without Passing EOG Test

	Grade 3			Grade 8			Grade 10			TOTAL		
	Rdg	Math	Both	Rdg	Math	Both	Rdg	Math	Both	Rdg	Math	Both
No. Promoted w/o Passing EOG	35	14	10	42	12	7	30	7	7	107	33	24
No. Promoted w/i 1 Point on EOG	16	1	0	20	8	3	9	5	0	45	14	3
Pct. Promoted w/i 1 Point on EOG	46	7	0	48	67	43	30	71	0	42	42	12

However, this table also shows that a large percentage of these students (30 to 48 percent for reading and 7 to 71 percent for mathematics) who were promoted without passing both of the EOG components were within 1 scale score point of passing the component(s) they were not passing. Over all grades, 62 students (37.8 percent) were promoted because they were within 1 point of passing one or both of the EOG components.

Table IV presents the results from the third administration of the End of Grade test to the 929 students following the completion of summer school. Eighth grade students were clearly more successful (49 percent success rate) in summer school as compared to third grade (30.7 percent success rate) and fifth grade (31.1 percent success rate) students. In other words, while about half of eighth grade students were promoted following summer school based on successfully passing the EOG, less than one-third of third and fifth graders met this criterion for promotion.

TABLE IV

Success in Summer School by Grade Level

			Grade			Total
			03	05	08	
Pass Summer School	Not Pass at End of Summer School	Count	259	208	129	596
		% within Grade	69.3%	68.9%	51.0%	64.2%
	Pass at End of Summer School	Count	115	94	124	333
		% within Grade	30.7%	31.1%	49.0%	35.8%
Total		Count	374	302	253	929
		% within Grade	100.0%	100.0%	100.0%	100.0%

Table V presents part of the reason for this differential success rate. Fewer eighth grade students had to pass EOG tests in both subject areas and more eighth grade students had to pass only the mathematics component.

TABLE V

Subjects Needed to Pass for Promotion by Grade Level

			Grade			Total
			03	05	08	
Subjects Needed to Pass	Both Rdg and Math	Count	172	103	80	355
		% within Grade	46.0%	34.1%	31.6%	38.2%
	Math Only	Count	80	50	105	235
		% within Grade	21.4%	16.6%	41.5%	25.3%
	Reading Only	Count	122	149	68	339
		% within Grade	32.6%	49.3%	26.9%	36.5%
Total		Count	374	302	253	929
		% within Grade	100.0%	100.0%	100.0%	100.0%

Table VI on the next page presents the rest of the reason. As clearly shown, students across all grade levels who needed to pass only the Mathematics component of the EOG test were successful 70 percent of the time, while students needing to pass only the Reading component were successful only 41 percent of the time. Less than one out of ten students needing to pass both test components was successful.

TABLE VI

Pass Summer School * Grade * Subjects Needed to Pass Crosstabulation

Subjects Needed to Pass				Grade 03	Grade 05	Grade 08	Total
Both Rdg and Math	Pass Summer School	Not Pass at End of Summer School	Count	159	95	71	325
			% within Grade	92.4%	92.2%	88.8%	91.5%
		Pass at End of Summer School	Count	13	8	9	30
			% within Grade	7.6%	7.8%	11.3%	8.5%
	Total		Count	172	103	80	355
			% within Grade	100.0%	100.0%	100.0%	100.0%
Math Only	Pass Summer School	Not Pass at End of Summer School	Count	33	22	16	71
			% within Grade	41.3%	44.0%	15.2%	30.2%
		Pass at End of Summer School	Count	47	28	89	164
			% within Grade	58.8%	56.0%	84.8%	69.8%
	Total		Count	80	50	105	235
			% within Grade	100.0%	100.0%	100.0%	100.0%
Reading Only	Pass Summer School	Not Pass at End of Summer School	Count	67	91	42	200
			% within Grade	54.9%	61.1%	61.8%	59.0%
		Pass at End of Summer School	Count	55	58	26	139
			% within Grade	45.1%	38.9%	38.2%	41.0%
	Total		Count	122	149	68	339
			% within Grade	100.0%	100.0%	100.0%	100.0%

Thus, passing the Mathematics component of the EOG was apparently much easier than passing only the Reading component, and especially was easier than passing both components. This is further evidenced in Table VII. Here we see that while over 100 fewer students needed to pass the Mathematics component only than the Reading component only (as shown in Table VI), a much larger percentage of these students were able to jump from a Achievement Level of 1 on the first administration or the retest of the EOG to a successful completion (Level 3) on the test at the end of summer school. This was especially true for Grade 8 students, where 37 of them were able to jump from Achievement Level 1 to Achievement Level 3 following the successful completion of summer school. In all, 35 students (out of 929, or almost 4 percent) were able to improve from Achievement Level 1 on the End of Grade test to Level 2 on the retest less than 2 weeks later to Level 3 following the completion of 18 days of summer school.

TABLE VII
Number of Students Improving from Achievement Level 1 to Achievement Level 3 by End of Summer School Test

		Grade 3	Grade 5	Grade 8	Total
Test or Retest=1 → End of SS = 3	Reading	11	5	4	20
	Mathematics	7	6	37	50
1 → 2 → 3 Pattern	Reading	7	4	3	14
	Mathematics	5	1	29	35

Finally, Table VIII on page 9 shows the promotion rates based on EOG scores for African-American students versus white students following the completion of summer school. As shown, while over half of the white students who had to attend and be successful in summer school were successful, only a little more than a third of the African-American students were successful. In other words, a higher proportion of white students was promoted than were African-American students following the completion of summer school.

Conclusions

Several conclusions can be reached from these analyses. First, low achieving white students are more likely to be successful in summer school than African-American students. Second, students needing to pass both the Reading and Mathematics components of the End of Grade test following summer school have less than one chance in ten of being successful. Third, students who need only to pass the Mathematics component stand a much greater chance of promotion following summer school than if they need to pass the Reading component. Finally, the EOG tests themselves are inherently unstable measures of individual student performance as evidenced by the large numbers of students improving from Achievement Level 1 (the lowest level) to Achievement Level 3 (considered to be on-grade level work) in less than a 6 week period of time.

Although a gateway summer school is a relatively minor expenditure, a third of all students not performing at grade level is a significant number of students. Furthermore, the consequence of not passing the EOG at the end of summer school is for the student to have to repeat the grade, which is a very significant expenditure. The traditional 18-day summer school could, perhaps, be more productive if it is targeted towards a more restrictive population (e.g., students needing only to pass the Mathematics component, or at least the exclusion of students needing to pass both components). Perhaps a longer summer school session could be provided for those students

needing more intensive instruction. Finally, the fairly low success rate for the Reading component of summer would seem to indicate that an alternative approach be offered in subsequent summer schools.

TABLE VIII

Summer School Passing Rate by Ethnicity by Grade Level

Ethnicity			Grade 03	Grade 05	Grade 08	Total
Black	Not Pass at End of Summer School	Count	228	193	120	541
		% within Grade	69.7%	70.2%	52.9%	65.3%
	Pass at End of Summer School	Count	99	82	107	288
		% within Grade	30.3%	29.8%	47.1%	34.7%
	Total	Count	327	275	227	829
		% within Grade	100.0%	100.0%	100.0%	100.0%
White	Not Pass at End of Summer School	Count	11	6	7	24
		% within Grade	45.8%	60.0%	36.8%	45.3%
	Pass at End of Summer School	Count	13	4	12	29
		% within Grade	54.2%	40.0%	63.2%	54.7%
	Total	Count	24	10	19	53
		% within Grade	100.0%	100.0%	100.0%	100.0%